

## PCT

## INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference <b>J2072 (C) LH</b>	<b>FOR FURTHER ACTION</b> see Form PCT/ISA/220 as well as, where applicable, item 5 below.	
International application No. <b>PCT/EP2004/005274</b>	International filing date (day/month/year) <b>17/05/2004</b>	(Earliest) Priority Date (day/month/year) <b>04/06/2003</b>
Applicant <b>UNILEVER PLC</b>		

This International Search Report has been prepared by this international Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the international Bureau.

This International Search Report consists of a total of 3 sheets.

☒ It is also accompanied by a copy of each prior art document cited in this report.

## 1. Basis of the report

- a. With regard to the **language**, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ The international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

- b. ☐ With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, see Box No. I.

2. ☐ **Certain claims were found unsearchable** (See Box II).

3. ☐ **Unity of invention is lacking** (see Box III).

4. With regard to the **title**,

☒ the text is approved as submitted by the applicant.

☐ the text has been established by this Authority to read as follows:

5. With regard to the **abstract**,

☒ the text is approved as submitted by the applicant.

☐ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box No. IV. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. With regards to the **drawings**,

- a. the figure of the **drawings** to be published with the abstract is Figure No. \_\_\_\_\_

☐ as suggested by the applicant.

☐ as selected by this Authority, because the applicant failed to suggest a figure.

☐ as selected by this Authority, because this figure better characterizes the invention.

- b. ☐ none of the figures is to be published with the abstract.

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 C11D17/08 C11D9/00 C11D9/26 C11D10/04

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C11D

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 4 310 432 A (BROUWER HENDRIK W) 12 January 1982 (1982-01-12) cited in the application column 1, lines 62-66; claims; examples VI-XVII -----	1-10
A	GB 348 689 A (HENKEL GMBH) 14 May 1931 (1931-05-14) page 1, lines 34-51; example 4 -----	1-10
A	WO 98/02139 A (INDUSRIA E COMERCIO DE COSMETICOS NATURA LTDA) 22 January 1998 (1998-01-22) page 1, lines 11-15; example 1 -----	1-10

☐ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

## \* Special categories of cited documents:

\*A\* document defining the general state of the art which is not considered to be of particular relevance

\*E\* earlier document but published on or after the international filing date

\*L\* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

\*C\* document referring to an oral disclosure, use, exhibition or other means

\*P\* document published prior to the international filing date but later than the priority date claimed

\*T\* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

\*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

\*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

\*S\* document member of the same patent family

Date of the actual completion of the international search

20 August 2004

Date of mailing of the international search report

30/08/2004

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2  
NL - 2280 HV Rijswijk  
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl  
Fax (+31-70) 340-3016

Authorized officer

Pentek, E

## INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/EP2004/005274

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 4310432	A	12-01-1982	GB 1461586 A	13-01-1977
			AT 379825 B	10-03-1986
			AT 208674 A	15-11-1976
			AU 6657574 A	18-09-1975
			AU 6658774 A	18-09-1975
			BE 812160 A1	01-07-1974
			BE 812210 A1	12-09-1974
			CA 1010337 A1	17-05-1977
			CH 587910 A5	13-05-1977
			DE 2411528 A1	26-09-1974
			DE 2411580 A1	26-09-1974
			DK 145784 B	28-02-1983
			ES 424294 A1	16-01-1977
			FI 58344 B	30-09-1980
			FR 2221515 A1	11-10-1974
			FR 2221516 A1	11-10-1974
			GB 1461133 A	13-01-1977
			IT 1009300 B	10-12-1976
			JP 958786 C	14-06-1979
			JP 50046708 A	25-04-1975
			JP 53042042 B	08-11-1978
			LU 69612 A1	10-07-1974
			NL 7403257 A ,B,	17-09-1974
			NL 7403337 A ,B	16-09-1974
			NO 141655 B	07-01-1980
			SE 415195 B	15-09-1980
			US 4065398 A	27-12-1977
			ZA 7401662 A	26-11-1975
GB 348689	A	14-05-1931	DE 541235 C	09-01-1932
WO 9802139	A	22-01-1998	BR 9603085 A	05-05-1998
			WO 9802139 A1	22-01-1998



INVESTOR IN PEOPLE

Application No: GB 0319165.7  
Claims searched: 1-10

Examiner: Michael Conlon  
Date of search: 5 February 2004

## Patents Act 1977 : Search Report under Section 17

### Documents considered to be relevant:

Category	Relevant to claims	Identity of document and passage or figure of particular relevance	
X	1-10	CH00654327 A5	VAN DINE the Example
X	1-10	GB0348689	HENKEL page 1 lines 60-61 and Example 4
A	-	US4310432	LEVER BROTHERS
A	-	US2089305	STUECKDORN

### Categories:

X	Document indicating lack of novelty or inventive step	A	Document indicating technological background and/or state of the art.
Y	Document indicating lack of inventive step if combined with one or more other documents of same category.	P	Document published on or after the declared priority date but before the filing date of this invention.
&	Member of the same patent family	E	Patent document published on or after, but with priority date earlier than, the filing date of this application.

### Field of Search:

Search of GB, EP, WO & US patent documents classified in the following areas of the UKC<sup>W</sup>:

C5D

Worldwide search of patent documents classified in the following areas of the IPC<sup>7</sup>:

C11D

The following online and other databases have been used in the preparation of this search report:

Online: WPI EPODOC JAPIO

## Display from WPINDEX

ANSWER 1 © 2006 THE THOMSON CORP on STN

### Title

Liq. soap compsn. - comprising vegetable oils, potassium hydroxide and plant extracts.

### Derwent Class

D21

### Inventor Name

VANDINE, R G

### Patent Assignee

(VDIN-I) VAN DINE R G

### Patent Information

CH 654327 A 19860214 (198612)\* 2

### Application Details

CH 654327 A CH 1983-2778 19830520

### Priority Application Information

CH 1983 2778 19830520

### Abstract

CH 654327 A UPAB: 19930922

Liq. soap compsn. contg. no pharmaceutical materials comprises (on total wt. of compsn.) 5-35% of coconut-, castor-, olive-, almond- and bay leaf oils; 1-10% of KOH and 0.5% of plant extracts. It pref. also contains up to 5% of glycerin, up to 2% of hydrolysed protein, up to 1% of borax and up to 1% of honey, the remainder being water.

Pref. compsn. comprises (wt.%): H<sub>2</sub>O 59.85; coconut oil 18.00; KOH 5.30; glycerin 4.10; castor oil 4.00; Aloe vera extract 3.00; hydrolysed protein 1.50; olive oil 1.00; almond oil 1.00; honey 1.00; bay leaf oil 0.50; borax 0.50; cucumber juice 0.05; witch hazel 0.05; lemon oil 0.05; elder flowers 0.05; soap chips 0.05.  
0/0

### Accession Number

1986-075948 [12] WPINDEX

### Document Number, CPI

C1986-032460

[Full-Text Options](#)[STN Keep & Share](#)[Search the Web](#)

with



Novelty? Transparent?

CH 024321 A5



CONFÉDÉRATION SUISSE  
OFFICE FÉDÉRAL DE LA PROPRIÉTÉ INTELLECTUELLE

⑪ CH 654 327 A5  
⑤① Int. Cl.: C 11 D 9/60

Brevet d'invention délivré pour la Suisse et le Liechtenstein  
Traité sur les brevets, du 22 décembre 1978, entre la Suisse et le Liechtenstein

⑫ FASCICULE DU BREVET A5

⑪ Numéro de la demande: 2778/83

⑫ Date de dépôt: 20.05.1983

⑭ Brevet délivré le: 14.02.1986

⑮ Fascicule du brevet  
publié le: 14.02.1986

⑬ Titulaire(s):  
Robert G. van Dine, Genève

⑯ Inventeur(s):  
Van Dine, Robert G., Genève

⑰ Mandataire:  
Katzarov SA, Genève

⑮ Composition de savon liquide.

- ⑮ La composition de savon liquide contient:  
5 - 35 % d'huile de coco, de castor, d'olive, ou de  
feuilles de laurier,  
1 - 10 % d'hydroxyde de potasse  
0,5 - 5 % d'extraits de plantes.

## REVENDEICATIONS

1. Composition de savon liquide, à l'exclusion des produits médicaux ou prophylactiques, caractérisée en ce qu'elle comprend, calculée sur le poids total de la composition, 5 à 35% d'huile de coco, de castor, d'olive, d'amande, de feuilles de laurier, 1 à 10% d'hydroxyde de potasse et 0,5% d'extraits de plantes.

2. Composition de savon liquide selon la revendication 1, caractérisée en ce qu'elle contient en plus jusqu'à 5% de glycérine, jusqu'à 2% de protéine hydrolysée, jusqu'à 1% de borax et jusqu'à 1% de miel, le reste étant de l'eau.

3. Composition de savon liquide selon la revendication 2, caractérisée en ce qu'elle comprend:

Eau	59,85
Huile de coco	18,00
Hydroxyde de potasse	05,30
Glycérine	04,10
Huile de castor	04,00
Extrait d' <i>aloes vera</i>	03,00
Protéine hydrolysée	01,50
Huile d'olive	01,00
Huile d'amande	01,00
Miel sauvage	01,00
Huile de feuilles de laurier	00,50
Borax	00,50
Jus de concombre	00,05
Hamamélis	00,05
Huile de citronnier	00,05
Fleurs de sureau	00,05
Copeaux de savon	00,05

La présente invention a pour objet une composition de savon liquide telle qu'elle est indiquée dans l'introduction de la revendication 1.

L'invention est caractérisée par la partie caractérisante de la revendication 1. La composition combine un certain nombre d'huiles saponifiées avec un mélange d'extraits de plantes. Ces extraits de plantes empêchent le dessèchement du savon lors de son emploi répété. Les extraits de plantes sont également ajoutés pour favoriser l'effet nettoyant.

Un exemple préféré d'une composition est donné ci-après en pourcentage de poids:

Eau	59,85
Huile de coco	18,00
Hydroxyde de potasse	05,30
Glycérine	04,10
Huile de castor	04,00
Extrait d' <i>aloes vera</i>	03,00
Protéine hydrolysée	01,50
Huile d'olive	01,00
Huile d'amande	01,00
Miel sauvage	01,00
Huile de feuilles de laurier	00,50
Borax	00,50
Jus de concombre	00,05
Hamamélis	00,05
Huile de citronnier	00,05
Fleurs de sureau	00,05
Copeaux de savon	00,05

Cette composition de savon liquide combine les huiles naturelles saponifiées avec les extraits de plantes.



Complete Accepted: May 14, 1931.

## COMPLETE SPECIFICATION.

## Improved Manufacture of Soap.

We, HENKEL & Cie G.M.B.H., of 67, Heyestrasse, Dusseldorf-Holthausen, Germany, a body corporate organised under German Law, do hereby declare the nature of this invention and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement:—

The applicants have obtained protection by Patent No. 301,020 for a process for the manufacture of liquid, non-gelatinising potash soaps, wherein ammonium thiosulphate is added dry or in solution to the liquid potash soaps. The liquid soap so manufactured possesses, however, the disadvantage that in the course of time they darken and often have a tendency to become reddish or reddish-brown.

It has now been found that gelatinisation and the above-mentioned defect may be avoided by the addition of potassium salts of acetic or lactic acid to liquid potash soaps. The said salts may be added either in the solid state or in solution to the soap. The procedure may be carried out, however, by adding for example an excess of alkaline reacting potassium compounds to the soap and then adding the requisite quantity of acetic acid or lactic acid. Soaps manufactured in this manner do not afterwards darken but retain their limpid colour.

The liquid potash soaps manufactured according to this process are liquid down to  $-8^{\circ}\text{C}$ . without any further addition of glycerin, alcohol, sugar or potash. They have a clear appearance and strikingly good lathering powers, they are further stable for storing, do not thicken in the course of time and may be diluted without gelatinising to any desired fatty acid content. Below a temperature of  $-3^{\circ}\text{C}$ . they become a little cloudy, but they are still sufficiently fluid to pass readily through the openings of the soap distributor. At  $+8^{\circ}\text{C}$ . they become perfectly clear again, unlike other liquid soaps of commerce, in which this process of becoming clear does not set in until about  $13^{\circ}\text{C}$ . The liquid soaps manufactured according to the process are not sticky and have the advantage of cheap-

[Price 1/-]

ness over the usual liquid soaps of commerce.

For special purposes, the potash soaps manufactured with the addition of potassium salts of acetic or lactic acid may also be manufactured with other additions of substances which are inert to the salts named, such as glycerin, glycol, disinfectants, perfumes, solvents and the like.

## EXAMPLES.

1. 8 kg. of coconut oil, 2 kg. of tallow and 1.3 kg. of oleic acid are saponified lukewarm with 7.2 kg. of a solution of caustic potash ( $40^{\circ}\text{Be}$ ) with the addition of 15 litres of water. Shortly after saponification, 3.2 kg. of a 50 per cent solution of potassium acetate is added. The product is then left to cool and any impurities are filtered off.

2. 500 kg. of coconut oil and 65 kg. of oleic acid are saponified lukewarm with 400 kg. of a solution of caustic potash ( $40^{\circ}\text{Be}$ ) with the addition of 1800 litres of water. Then 155 kg. of a 50 per cent solution of potassium lactate is added to the soap.

3. 400 kg. of coconut oil fatty acid, 100 kg. of tallow fatty acid and 65 kg. of oleic acid are saponified lukewarm with 400 kg. of a solution of caustic potash ( $40^{\circ}\text{Be}$ ) with the addition of 1600 litres of water. Then 157 kg. of a 50 per cent solution of potassium acetate or 155 kg. of a 50 per cent solution of potassium lactate are added to the soap so manufactured.

4. 60 kg. of tallow fatty acid, 10 kg. of ricinoleic acid, 10 kg. of oleic acid and 15 kg. of highly sulphonated Turkey red oil are saponified lukewarm with 51 kg. of a solution of caustic potash ( $45.8^{\circ}\text{Be}$ ) to which 5.5 kg. of a 50 per cent solution of potassium acetate and water are added to form a 30 per cent liquid soap.

We are aware that it has already been proposed to add soluble lactates, for example sodium lactate, to soaps used for industrial and cleaning purposes, such as toilet, medicated, shaving and household soaps.

Having now particularly described and ascertained the nature of our said inven-

55

60

65

70

75

80

85

90

95

100

105



tion and in what manner the same is to be performed, we declare that what we claim is:—

1. A process for the manufacture of a liquid, non-gelatinising potash soap, characterised in that potassium salts of lactic acid or of acetic acid are added in the solid state or in solution to a liquid potash soap.
2. A process as claimed in claim 1, characterised in that an excess of alkaline re-acting potassium compounds are added to a liquid potash soap and then the required quantity of acetic acid or lactic acid is added thereto.
3. The process of manufacturing potash soap substantially as described.

4. Potash soap when manufactured by the process claimed in any of the preceding claims.

20

Dated this 14th day of February, 1930.

HENKEL & CIE, G.m.b.H.,  
per: Boulton, Wade & Tennant,  
111/112, Hatton Garden, London,  
E.C. 1,

Chartered Patent Agents,  
Reference has been directed in pursuance of Section 7, Sub-section 4, of the Patents and Designs Acts, 1907 to 1928, to Specifications Nos. 7163 of 1899, and 173,915.

Redhill: Printed for His Majesty's Stationery Office, by Love & Malcomson, Ltd.—1931.



## INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

<b>(51) International Patent Classification <sup>6</sup> :</b> <b>A61K 7/48, 7/50, C11D 3/00</b>	<b>A1</b>	<b>(11) International Publication Number:</b> <b>WO 98/02139</b> <b>(43) International Publication Date:</b> <b>22 January 1998 (22.01.98)</b>
<b>(21) International Application Number:</b> PCT/BR97/00028 <b>(22) International Filing Date:</b> 10 July 1997 (10.07.97)  <b>(30) Priority Data:</b> PI 9603085-2 12 July 1996 (12.07.96) <b>BR</b>  <b>(71) Applicant (for all designated States except US):</b> INDÚSTRIA E COMÉRCIO DE COSMÉTICOS NATURA LTDA. [BR/BR]; Rodovia Regis Bittencourt, Km 293, Itapeceira da Serra, CEP-06850-000 São Paulo, SP (BR).  <b>(72) Inventors; and</b> <b>(75) Inventors/Applicants (for US only):</b> SOUZA, Simoni, Chitarrá [BR/BR]; Apartamento 331, Rua Estela, 22, Vila Mariana, CEP-04011-000 São Paulo, SP (BR). MARTINS MATHEUS, Luiz, Gustavo [BR/BR]; Apartamento 83 B, Rua Visconde de Alcantara, 33, Vila Alpina, CEP-03205-060 São Paulo, SP (BR).  <b>(74) Agent:</b> MOMSEN, LEONARDOS & CIA.; 10th floor, Rua Teófilo Otoni, 63, Centro, CEP-20090-080 Rio de Janeiro, RJ (BR).	<b>(81) Designated States:</b> CA, MX, US, European patent (AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE).  <b>Published</b> <i>With international search report.          Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.</i>	

**(54) Title:** LIQUID ANTISEPTIC SOAP FOR SKIN CARE**(57) Abstract**

The present invention provides an antiseptic, liquid, mild action composition, with the specific function of skin impurities removal and excessive oiliness fight in order to avoid, specially, the sebaceous follicle inflammation and infection. This is obtained through active components association, constituted of mild surfactant agents, for skin cleansing, together with a specific keratolytic agent, being this d-tartaric acid, and two antiseptic agents, being them predominantly triclosan, and thymol, as cooperative. This set of active components is dissolved and/or dispersed in an aqueous vehicle, which also contains adjuvant components, chosen between preserving agents, thickeners, solutizers, humectant and refreshing agents and perfumes usual in liquid, aqueous cosmetics, all of them cooperating for the physicochemical stability, germicide and/or bacteriostatic action, as well as a pleasant sensorial when the composition, formulated in the described way, is applied to the skin.

# FOR THE PURPOSES OF INFORMATION ONLY

Codes used to identify States party to the PCT on the front pages of pamphlets publishing international applications under the PCT.

AL	Albania	ES	Spain	LS	Lesotho	SI	Slovenia
AM	Armenia	FI	Finland	LT	Lithuania	SK	Slovakia
AT	Austria	FR	France	LU	Luxembourg	SN	Senegal
AU	Australia	GA	Gabon	LV	Latvia	SZ	Swaziland
AZ	Azerbaijan	GB	United Kingdom	MC	Monaco	TD	Chad
BA	Bosnia and Herzegovina	GE	Georgia	MD	Republic of Moldova	TG	Togo
BB	Barbados	GH	Ghana	MG	Madagascar	TJ	Tajikistan
BE	Belgium	GN	Guinea	MK	The former Yugoslav Republic of Macedonia	TM	Turkmenistan
BF	Burkina Faso	GR	Greece	ML	Mali	TR	Turkey
BG	Bulgaria	HU	Hungary	MN	Mongolia	TT	Trinidad and Tobago
BJ	Benin	IE	Ireland	MR	Mauritania	UA	Ukraine
BR	Brazil	IL	Israel	MW	Malawi	UG	Uganda
BY	Belarus	IS	Iceland	MX	Mexico	US	United States of America
CA	Canada	IT	Italy	NE	Niger	UZ	Uzbekistan
CF	Central African Republic	JP	Japan	NL	Netherlands	VN	Viet Nam
CG	Congo	KE	Kenya	NO	Norway	YU	Yugoslavia
CH	Switzerland	KG	Kyrgyzstan	NZ	New Zealand	ZW	Zimbabwe
CI	Côte d'Ivoire	KP	Democratic People's Republic of Korea	PL	Poland		
CM	Cameroon	KR	Republic of Korea	PT	Portugal		
CN	China	KZ	Kazakhstan	RO	Romania		
CU	Cuba	LC	Saint Lucia	RU	Russian Federation		
CZ	Czech Republic	LI	Liechtenstein	SD	Sudan		
DE	Germany	LK	Sri Lanka	SE	Sweden		
DK	Denmark	LR	Liberia	SG	Singapore		
EE	Estonia						

"LIQUID ANTISEPTIC SOAP FOR SKIN CARE".

**Invention General Description**

5 The present invention provides a liquid soap composition, antiseptic, of mild action, intended for skin impurities removal, protecting the skin against exogenous germs, avoiding their propagation.

With this objective, was investigated the cooperative action between the specific additives, exhibiting keratolytic and antiseptic action, and the basis components, which are already usual cleansing agents used in the  
10 formulation of toilet soaps and other cosmetic preparations.

In this new soap composition, the referred components physical or aggregation state is also important. The composition shall present the form of a viscous liquid of easy skin application, with no free flowing, exhibiting adequate organoleptic properties referring to pleasant aroma and color, and  
15 be lightly colorless to light yellow and transparent to lightly translucent.

The here described cosmetic composition was developed as the result of several researches, exhibiting physicochemical and microbiological stabilities and also a pleasant sensorial when applied to the skin.

The cosmetic composition basis is an aqueous phase, which can contain sodium salts and, eventually, potassium and/or ammonium salts, of fatty acids  $C_{12}$ - $C_{18}$ , of saponaceous nature, which constitutes the present  
20 invention vehicle, corresponding to 40,00% to 70,00%, by weight, in relation to the global composition.

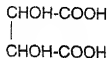
This vehicle actuates as dissolving or dispersing medium for the specific additives. The composition active principles are: (i) surfactant agents,  
25 (ii) a keratolytic agent, (iii) antiseptic agents, and the usual additives that are chosen among the group comprising: preservatives, thickeners, solutizers, humectants, refreshing agents and fragrance or perfumes.

30 **Detailed description**

The active principles, associated in the present liquid soap, comprise mild action surfactant compounds as cleansing surfactant agents. These compounds promote skin cleansing and excessive oiliness removal, with no skin aggressing action. These surfactants are already usual by themselves,  
35 and it is possible to name, among others, ethylene and/or propylene oxide adducts as fatty alcohols or fatty acids, their derivatives, as esters including amino derivatives, as, for example, ethanolamines, and amides, that belong to the non-ionic surfactants class; eventually, it is possible to add cationic surfactants, specially quaternary ammonium compounds, mainly as additive  
40 to non-ionic surfactants.

In the present compositions, these active components are used in a ratio varying between 10,00% to 30,00%, by weight, in relation to the global composition.

The keratolytic agent chosen is tartaric acid, which can be considered a natural product, since it is obtained as a byproduct of the wine-growing industry. It is a dioxide-diacid or an alpha-hydroxy acid exhibiting the following formula:



- 10 being used, preferably, dextrogyrate among the several optical isomers of this acid, added in a 0,05 to 2,00% ratio, by weight.

The specific action of this active component is to help in the sebaceous follicle clearance, allowing free sebum, or fat, secretion (formed in these follicles). Consequently, the component contributes for a good sebaceous glands functioning, whose disturbance is one of the causes responsible for their inflammation, with consequent skin affection. The tartaric acid also reduces the corneal layer cells cohesion, causing a microexfoliation, mainly of cells exhibiting low or none vitality, removing them. An other tartaric acid function is to contribute to the product pH adjustment in a range closer to the physiologically adequate value, so that it does not promote undesirable skin alterations, usually near pH = 7,0 or lower.

In the present soap, two antiseptic agents were added, one exhibiting bacteriostatic action, namely, specially the triclosan product, acting on the skin superficial area. The second antiseptic agent is thymol, a natural product, being extracted of the *Thymus vulgaris* and *Monarda punctata* plants.

These two antiseptics exhibit synergistic cooperation in the fight against microbial proliferation, to which the air exposed skin (hands, arms, face and neck) is more subjected. They are added in a rather low ratio, between 0,05 to 0,50%, by weight, for triclosan, and between 0,001 to 0,100%, by weight, for thymol. These values refer to the global composition.

The usual additives, which complete the present composition, are all widely known and of common usage in skin cleansing cosmetics and were already generally mentioned above.

In detail, these additives comprise:

- 35 a) A preservative agent, to protect the composition against the degrading action of actinic light, oxygen contained in air and accidental components, as acid vapors and gases, oxidants and other degrading agents, which can also be biological, for example bacteria.

The preservative agent(s) is(are) chosen within the group comprising parabens, thiazolidines, imidazolidinyl urea, diazolidinyl urea, formaldehyde, or formaldehyde *in situ* forming compounds, as paraformaldehyde, benzoic acid and their alkyl and benzyl esters, quaternium 15, phenoxyethanol, 2-bromo-2-nitropropane-1,3-diol.

45 These preserving agents are added in a 0,10 to 1,00% ratio, by weight, in relation to the composition.

b) A thickener is incorporated to improve composition's consistency and avoid an undesirable product flowing when it is applied onto the skin. These are widely available in the market, and can be organic, as hydrophilic and carboxyvinyl polymers, as poly(vinyl acetate), which can be associated to poly(vinyl alcohol), acrylic, as the acids themselves or their acrylic and metaacrylic acid esters, natural gums, starch or modified starch, for example, hydrolyzed, cellulose derivative, for example ethers and esters and/or salts, fatty alcohols, polyethylene glycol stearates, or inorganic, as modified aluminium or magnesium silicates, esmectitas and hydrated aluminium silicates. It is also possible to use a mixture containing two or more above mentioned thickeners, which are added at a 0,10 to 5,00% ratio, by weight, in relation to the soap.

c) The solutizing agents function is to facilitate the solid components or little hydrophilic oils dissolution or fine dispersion; these are chosen between ethanol, its lower ethers and esters, ethoxylated fatty alcohols derivatives, in other words, containing more than 5 ethylene oxide units for each alcohol molecule, and/or hydrogenated fatty alcohols, their sulphonic derivatives and respective alkaline and alkaline-earth salts, as for example sodium and calcium dodecylbenzenesulphonate. These adjuvants are usually added in a 1,00 to 5,00% ratio, by weight, also relating to the global composition.

d) If the superficial tension's modifying action exerted by the main, cleansing, surfactant agent is not enough to obtain the desired soap mass humectation and softness, it is possible to complete this property through the addition of an usual typically humectant agent in a 2,00 to 20,00% ratio. This can be chosen between glycerol and its lower esters and ethers, glycols and their derivatives, for example, propylene glycol, sorbitol, hydrosoluble or hydrophilic silicones.

e) Refreshing agents, as camphor and menthol, are simple compositions refining complements, in order to associate a skin freshness sensation, being usually used in a rather low ratio of 0,01 to 0,20%, by weight. Fragrance and perfume are also optional additives, usually added in a 0,05 to 0,50% ratio, by weight, being chosen between those usually used in toilet soaps, as for example lavender, floral, cologne and others.

However, these additives can be omitted in some cases, specially in the manufacturing of neutral and odorless soaps, meant for sensitive skins.

As variation, the vehicle itself can also dispense the presence of usual soaps, so that the cleansing action is performed by the surfactants.

The liquid soap preparation process, although employing customary operations for components dissolution and dispersion in the aqueous vehicle, requires some special precautions.

Thus, the antiseptic agents and the fragrance, usually being an oily essence, should be previously solubilized in the solutizing agent (c) or in a specific and adequate solvent. The resulting solution is added after concluding total dispersion or mixture of the other components in the aqueous phase. This can contain fatty acids  $C_{12}$ - $C_{18}$  alkaline salt, or, for some specific applications, as soaps meant for sensitive skins, these salts are not added.

The aqueous phase constitutes global composition's 40% to 70%, by weight. With the aid of mechanical stirring equipment, the chosen ratios of surfactants, humectant, tartaric acid, preserving and, eventually, refreshing agents, thickener and, at last, the previously prepared solution containing antiseptic agents and essence or fragrance are dissolved or dispersed in the aqueous phase, through vigorous stirring until complete homogenization. The components quantity is adjusted to result in 100%, by weight total, being also by weight the component ratios described bellow.

Following some examples, with simple illustration character, of the present invention compositions:

#### Example 1

An initial water quantity, corresponding to final mixture's 50%, is used to dissolve or disperse, through stirring, 10%, by weight, of a neutral sodium soap. After that, the following components are dispersed or dissolved, successively, in this solution:

20,00% surfactant agents, chosen between polyoxiethylene adducts, with 5 to 40 ethylene oxide units for each molecule, linoleic or oleic or palmitic acid and/or ceryl alcohol and/or castor-oil;

0,50% keratolytic agent, d-tartaric acid;

2,50% thickener, chosen between hydrolyzed starch, solubilized gum tragacanth, carboxymethylcellulose and their mixtures;

4,00% solutizer, which can be pure ethanol, preferably an ethoxylated cetyl or myristyl alcohol derivative, or the mixture of them;

12,00% humectant, as glycol oleate;

0,15% menthol, as refreshing agent;

0,15% floral fragrance; and

0,20% antiseptic agent, triclosan based, with adjunction of

0,01% thymol.

#### Example 2

The example 1 was repeated, having 60,00% water as vehicle and the adjunction of the other above mentioned components.

#### Example 3

The example 1 was repeated, using diethylene glycol stearate and/or glycerol monostearate as thickener together with poly(vinyl alcohol) and/or poly(vinyl acetate).

### Conducted Tests

Several above described antiseptic soaps types, for skin care, were submitted to usual dermatological tests, including primary and accumulated irritability, sensitization, phototoxicity and photoallergy evaluations.

5       The conducted tests demonstrated the present composition innocuousness, conferring them the status of dermatologist tested and accepted.

10       The comedogenicity test was also conducted, conferring this invention product the status of "not comedogenic" and, thus, accepted in this particular subject.

15       To demonstrate the invented antiseptic liquid soap performance, referring to its specific cleansing and skin care function, a clinical test was conducted with volunteers, adolescents and young individuals, mostly subjected to skin irritation and sebaceous glands affections, which can cause acne development in grades I and II.

      The results demonstrated the present liquid soap efficiency, being antiseptic in skin cleansing and hygienic in at least 65,0% of the cases.

20       It was also verified that, through the association of the present composition with an other product of the same here claimant, presented as co-pending request, namely, an "oiliness balancing gel", occurred a synergistic effect, resulting in skin oiliness reduction in 92,5% test volunteers, with lesion number reduction (due to acne) in 65,0% of the observed cases.



**CLAIMS**

1. Liquid antiseptic soap for skin care, of mild action, with the specific function of skin impurities removal, characterized by the fact of comprising  
5 10,101% to 32,600%, by weight, of a set of active components, constituted of:  
10,00 to 30,000%, by weight, of surfactant agents, for skin cleansing;  
0,050 to 2,000%, by weight, of keratolytic agent, d-tartaric acid;  
0,050 to 0,500%, by weight, of antiseptic agent, triclosan;  
0,001 to 0,100%, by weight, of cooperative antiseptic agent, thymol,  
10 being the remaining to complete composition's 100,000%, by weight,  
constituted of a liquid, aqueous vehicle, containing one or more adjuvants,  
chosen between preserving agents, thickeners, solutizers, humectants,  
refreshing agents and fragrance or perfumes.
- 15 2. Liquid antiseptic soap, according to vindication 1, characterized by  
the fact of comprising, as cleansing surfactant agents, mild action surfactant  
compounds, which remove skin excessive oiliness, chosen between the  
ethylene oxide adducts and/or propylene oxide with fatty alcohols, fatty acids,  
their respective esters, alcohols derivatives, as alkanolamines, specially  
20 ethanolamines, and amines, as fatty amides, and dependent non-ionic  
surfactants and, if convenient, specially as additional surfactants, cationic  
surfactant agents, specially quaternary ammonium compounds.
- 25 3. Liquid antiseptic soap, according to vindication 1, characterized by  
the fact of comprising, as vehicle, an aqueous medium, water based,  
containing usual quantities of sodium salts and, eventually, potassium and/or  
ammonium salts of fatty acids  $C_{12}-C_{18}$ .
- 30 4. Liquid antiseptic soap, according to vindication 1, characterized by  
the fact of comprising, as vehicle, an aqueous medium, water based,  
containing in itself dissolved or dispersed, one or more of the following  
additives: 0,10 to 1,00%, by weight, of preserving agent, chosen between  
parabens, thiazolidines, imidazolidinyl urea, diazolidinyl urea, formaldehyde,  
benzoic acid and their derivatives, quaternium 15, phenoxyethanol, 2-bromo-  
35 2-nitropropane-1,3-diol.
- 40 5. Liquid antiseptic soap, according to vindications 1 or 4,  
characterized by the fact of comprising also 1,00 to 5,00%, by weight, of a  
solutizing agent, chosen between ethanol compounds, ethoxylated and/or  
hydrogenated fatty alcohols derivatives and sulphonic derivatives and  
respective alkaline and alkaline-earth salts and their mixtures.

6. Liquid antiseptic soap, according to vindications 1 or 5, characterized by the fact of comprising also 0,10 to 5,00%, by weight, of a thickener agent chosen between hydrophilic polymers, specially vinyl, as poly(vinyl acetate), poly(vinyl alcohol), acrylic, as acrylic and metaacrylic acid derivatives and the (met)acrylic acids themselves, natural gums, starch and modified starches, cellulose derivatives, fatty alcohols, polyethylene glycol stearates and hydrated aluminium silicates.
7. Liquid antiseptic soap, according to vindications 1 or 6, characterized by the fact of comprising also 2,00 to 20,00%, by weight, of an humectant agent, chosen between glycerol and its lower esters and ethers, glycols and their derivatives, sorbitol and hydrophilic silicones.
8. Liquid antiseptic soap, according to vindications 1 or 7, characterized by the fact of comprising also 0,01 to 0,20%, by weight, of a refreshing agent, specially camphor or menthol, as well as 0,05 to 0,50%, by weight, of a fragrance or perfume.

## INTERNATIONAL SEARCH REPORT

International Application No.  
PCT/BR 97/00028A. CLASSIFICATION OF SUBJECT MATTER  
IPC 6 A61K7/48 A61K7/50 C11D3/00

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 6 A61K C11D

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	WO 96 06152 A (CIBA-GEIGY) 29 February 1996 see the whole document ---	1-8
A	EP 0 670 158 A (COLGATE-PALMOLIVE) 6 September 1995 see the whole document ---	1-8
A	DE 24 01 752 A (UNILEVER) 18 July 1974 see the whole document -----	1-8

☐ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex

## \* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier document but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"Z" document member of the same patent family

Date of the actual completion of the international search

Date of making of the international search report

25 November 1997

11/12/1997

Name and mailing address of the ISA  
European Patent Office, P.B. 5818 Patentaan 2  
NL - 2280 HV Rijswijk  
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl  
Fax: (+31-70) 340-3016

Authorized officer:

Fischer, J.P.

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/BR 97/00028

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 9606152 A	29-02-96	AU 3345195 A	14-03-96
		CZ 9700555 A	11-06-97
		EP 0777716 A	11-06-97
		FI 970741 A	21-02-97
		SK 24597 A	06-08-97
EP 670158 A	06-09-95	AU 1166295 A	24-08-95
		BR 9500625 A	17-10-95
		CA 2142419 A	15-08-95
		NZ 270476 A	27-02-96
		US 5646100 A	08-07-97
DE 2401752 A	18-07-74	GB 1460442 A	06-01-77
		AR 213160 A	29-12-78
		AU 6439974 A	10-07-75
		BE 809782 A	15-07-74
		CA 1022076 A	06-12-77
		CH 619263 A	15-09-80
		DK 146567 B	07-11-83
		FR 2324726 A	15-04-77
		IN 140639 A	11-12-76
		JP 1175643 C	14-11-83
		JP 49105808 A	07-10-74
		JP 58005237 B	29-01-83
		NL 7400452 A	17-07-74
		US 4268424 A	19-05-81
		ZA 7400206 A	27-08-75